

WHAT IS CLAIMED IS:

1. A glasses type display, which is used with an information communication terminal by connecting with a wire line or a wireless line, comprising:
 - an open and closed state detecting means that detects the open and closed state of side frames of said glasses type display;
 - a wearing state detecting means that detects the wearing state of said glasses type display by a user;
 - a displaying means that is disposed in a main frame of said glasses type display and displays images;
- 10 a voice and sound outputting means that outputs voice and sound;
- a voice and sound inputting means that inputs voice and sound; and
- a timer that measures a designated period, wherein:
 - 15 when a power source became the on state in said glasses type display, said glasses type display became a first state, in which said open and closed state detecting means is the on state, and said wearing state detecting means and said displaying means and said voice and sound outputting means and said voice and sound inputting means and said timer remain in the off state,
 - 20 at said first state, when said open and closed state detecting means detected the open state of said side frames, said glasses type display became a second state, in which said wearing state detecting means is the on state, and said displaying means and said voice and sound outputting means and said voice and sound inputting means and said timer remain in the off state,
 - 25 at said second state, when the user put on said glasses type display and said wearing state detecting means detected the wearing state of said glasses type display and a predetermined displaying

30 condition was satisfied, said glasses type display became a third state, in which said displaying means and said voice and sound outputting means and said voice and sound inputting means are the on state and said timer remains in the off state, and

35 at said third state, when said predetermined displaying condition has not been satisfied, said glasses type display became a fourth state, in which said timer starts measuring said designated period.

2. A glasses type display in accordance with claim 1, wherein:

5 at said fourth state, when said predetermined displaying condition was satisfied before finishing measuring said designated period by said timer, said fourth state changes to said third state.

3. A glasses type display in accordance with claim 1, wherein:

5 at said fourth state, when said predetermined displaying condition was not satisfied at the time when said timer finished measuring said designated period, said fourth state changes to said second state.

4. A glasses type display in accordance with any of claims 1 to 3, wherein:

said wearing state detecting means provides plural sensors for detecting the wearing state of said glasses type display, and

5 said predetermined displaying condition is satisfied at the time when the reacted number of said sensors is a predetermined number or more in said sensors.

5. A glasses type display in accordance with claim 1,
wherein:

at said second state, when said open and closed state detecting
means detected the closed state of said side frames, said second state
5 changes to said first state.

6. A glasses type display in accordance with claim 1,
wherein:

at said third state, when said open and closed state detecting
means detected the closed state of said side frames, said third state
5 changes to said first state.

7. A glasses type display in accordance with claim 1,
wherein:

at said fourth state, when said open and closed state detecting
means detected the closed state of said side frames, said fourth state
5 changes to said first state.

8. A glasses type display in accordance with claim 1,
wherein:

at said second state, said timer is started to measure said
designated period, and when said timer finished measuring said
5 designated period, regardless of said predetermined displaying condition,
said displaying means and said voice and sound outputting means and
said voice and sound inputting means are turned on.

9. A glasses type display in accordance with claim 1,
wherein:

at said third state, said timer is started to measure said
designated period, and when said timer finished measuring said

5 designated period, said displaying means and said voice and sound outputting means and said voice and sound inputting means are turned off.

10. A glasses type display in accordance with any of claims 1 to 9, wherein:

5 said information communication terminal is a mobile communication terminal and said glasses type display is in the communication state with said mobile communication terminal, and

10 when said mobile communication terminal received a call from another mobile communication terminal, regardless of said predetermined displaying condition, said displaying means and said voice and sound outputting means and said voice and sound inputting means are turned on.

11. A glasses type display in accordance with any of claims 1 to 9, wherein:

5 said information communication terminal is a mobile communication terminal and said glasses type display is in the communication state with said mobile communication terminal, and

when said mobile communication terminal ended a speech with another mobile communication terminal, said displaying means and said voice and sound outputting means and said voice and sound inputting means are turned off.

12. A glasses type display in accordance with any of claims 1 to 9, wherein:

5 said information communication terminal is a mobile communication terminal and said glasses type display is in the communication state with said mobile communication terminal, and

when said mobile communication terminal received an e-mail from another mobile communication terminal, regardless of said predetermined displaying condition, said displaying means and said voice and sound outputting means and said voice and sound inputting means are turned on.

13. A glasses type display in accordance with any of claims 1 to 9, wherein:

said information communication terminal is a mobile communication terminal and said glasses type display is in the communication state with said mobile communication terminal, and

when said mobile communication terminal entered a service area for mobile communication terminals, regardless of said predetermined displaying condition, said displaying means and said voice and sound outputting means and said voice and sound inputting means are turned on.

14. A glasses type display in accordance with any of claims 1 to 9, wherein:

said information communication terminal is a mobile communication terminal and said glasses type display is in the communication state with said mobile communication terminal, and

when the user of said mobile communication terminal made a specified speech, it was assumed that said predetermined displaying condition was satisfied by recognizing said specified speech, and said displaying means and said voice and sound outputting means and said voice and sound inputting means are turned on.

15. A glasses type display in accordance with any of claims 1 to 9, wherein:

5 said information communication terminal is a mobile communication terminal and said glasses type display is in the communication state with said mobile communication terminal, and

when the user of said mobile communication terminal made another specified speech, by recognizing another specified speech, said displaying means and said voice and sound outputting means and said voice and sound inputting means are turned off.

16. A glasses type display in accordance with any of claims 1 to 9, wherein:

5 said information communication terminal is a communication terminal, which provides an information receiving means for receiving information from the outside directly, and said glasses type display is in the communication state with said communication terminal, and

10 when said glasses type display received a designated signal from said information terminal, it was assumed that said predetermined displaying condition was satisfied, and said displaying means and said voice and sound outputting means and said voice and sound inputting means are turned on.

17. A glasses type display in accordance with any of claims 1 to 9, wherein:

5 said information communication terminal is a communication terminal, which provides an information receiving means for receiving information from the outside directly, and said glasses type display is in the communication state with said communication terminal, and

10 when said glasses type display received another designated signal from said information terminal, said displaying means and said voice and sound outputting means and said voice and sound inputting means are turned off.

18. A glasses type display in accordance with any of claims 1 to 9, wherein:

said information communication terminal is an audio-visual instrument, which provides an information receiving means for receiving 5 information from the outside directly, and said glasses type display is in the communication state with said audio-visual instrument, and

when said glasses type display received a designated signal from said audio-visual instrument, it was assumed that said predetermined displaying condition was satisfied, and said displaying 10 means and said voice and sound outputting means and said voice and sound inputting means are turned on.

19. A glasses type display in accordance with any of claims 1 to 9, wherein:

said information communication terminal is an audio-visual instrument, which provides an information receiving means for receiving 5 information from the outside directly, and said glasses type display is in the communication state with said audio-visual instrument, and

when said glasses type display received another designated signal from said audio-visual instrument, said displaying means and said voice and sound outputting means and said voice and sound inputting 10 means are turned off, or

when signals from said audio-visual instrument have not been received at said glasses type display, said displaying means and said voice and sound outputting means and said voice and sound inputting means are turned off.

20. A glasses type display in accordance with any of claims 1 to 19, wherein:

5 said glasses type display provides said information communication terminal inside of said glasses type display, instead of connecting to said information communication terminal.

21. A glasses type display controlling method in a glasses type display, which is used with an information communication terminal by connecting with a wire line or a wireless line, wherein:

5 said glasses type display, comprising:

an open and closed state detecting means that detects the open and closed state of side frames of said glasses type display;

a wearing state detecting means that detects the wearing state of said glasses type display by a user;

10 a displaying means that is disposed in a main frame of said glasses type display and displays images;

 a voice and sound outputting means that outputs voice and sound;

 a voice and sound inputting means that inputs voice and sound; and

15 a timer that measures a designated period, wherein:

 said glasses type display controlling method, comprising the steps of:

20 making said glasses type display a first state, in which said open and closed state detecting means is the on state, and said wearing state detecting means and said displaying means and said voice and sound outputting means and said voice and sound inputting means and said timer remain in the off state, when a power source became the on state in said glasses type display;

25 making said glasses type display a second state, in which said wearing state detecting means is the on state, and said displaying means and said voice and sound outputting means and said voice and sound

inputting means and said timer remain in the off state, when said open and closed state detecting means detected the open state of said side frames at said first state;

30 making said glasses type display a third state, in which said displaying means and said voice and sound outputting means and said voice and sound inputting means are the on state and said timer remains in the off state, when the user put on said glasses type display and said wearing state detecting means detected the wearing state of said glasses
35 type display and a predetermined displaying condition was satisfied at said second state; and

making said glasses type display a fourth state, in which said timer starts measuring said designated period, when said predetermined displaying condition has not been satisfied at said third state.

22. A glasses type display controlling method in accordance with claim 21, further comprising the steps of:

changing said fourth state to said third state, when said predetermined displaying condition was satisfied before finishing
5 measuring said designated period by said timer at said fourth state; and

changing said fourth state to said second state, when said predetermined displaying condition was not satisfied at the time when said timer finished measuring said designated period at said fourth state.

23. A glasses type display controlling method in accordance with claims 21 or 22, wherein:

said wearing state detecting means provides plural sensors for detecting the wearing state of said glasses type display, and

5 said predetermined displaying condition is satisfied at the time when the reacted number of said sensors is a predetermined number or

more in said sensors.

24. A glasses type display controlling method in accordance with claim 21, further comprising the steps of:

changing said second state to said first state, when said open and closed state detecting means detected the closed state of said side frames at said second state;

changing said third state to said first state, when said open and closed state detecting means detected the closed state of said side frames at said third state; and

changing said fourth state to said first state, when said open and closed state detecting means detected the closed state of said side frames at said fourth state.

25. A glasses type display controlling method in accordance with claim 21, further comprising the steps of:

starting said timer to measure said designated period at said second state; and

turning on said displaying means and said voice and sound outputting means and said voice and sound inputting means, by assuming that said predetermined displaying condition was satisfied, when said timer finished measuring said designated period.

26. A glasses type display controlling method in accordance with claim 21, further comprising the steps of:

starting said timer to measure said designated period at said third state; and

turning off said displaying means and said voice and sound outputting means and said voice and sound inputting means, when said timer finished measuring said designated period.

27. A glasses type display controlling method in accordance with any of claims 21 to 26, wherein:

said information communication terminal is a mobile communication terminal and said glasses type display is in the communication state with said mobile communication terminal, and

when said mobile communication terminal received a call from another mobile communication terminal, regardless of said predetermined displaying condition, said displaying means and said voice and sound outputting means and said voice and sound inputting means are turned on.

28. A glasses type display controlling method in accordance with any of claims 21 to 26, wherein:

said information communication terminal is a mobile communication terminal and said glasses type display is in the communication state with said mobile communication terminal, and

when said mobile communication terminal ended a speech with another mobile communication terminal, said displaying means and said voice and sound outputting means and said voice and sound inputting means are turned off.

29. A glasses type display controlling method in accordance with any of claims 21 to 26, wherein:

said information communication terminal is a mobile communication terminal and said glasses type display is in the communication state with said mobile communication terminal, and

when said mobile communication terminal received an e-mail from another mobile communication terminal, regardless of said predetermined displaying condition, said displaying means and said

voice and sound outputting means and said voice and sound inputting
10 means are turned on.

30. A glasses type display controlling method in accordance
with any of claims 21 to 26, wherein:

said information communication terminal is a mobile
communication terminal and said glasses type display is in the
5 communication state with said mobile communication terminal, and

when said mobile communication terminal entered a service
area for mobile communication terminals, regardless of said
predetermined displaying condition, said displaying means and said
voice and sound outputting means and said voice and sound inputting
10 means are turned on.

31. A glasses type display controlling method in accordance
with any of claims 21 to 26, wherein:

said information communication terminal is a mobile
communication terminal and said glasses type display is in the
5 communication state with said mobile communication terminal, and

when the user of said mobile communication terminal made a
specified speech, it was assumed that said predetermined displaying
condition was satisfied by recognizing said specified speech, and said
displaying means and said voice and sound outputting means and said
10 voice and sound inputting means are turned on.

32. A glasses type display controlling method in accordance
with any of claims 21 to 26, wherein:

said information communication terminal is a mobile
communication terminal and said glasses type display is in the
5 communication state with said mobile communication terminal, and

when the user of said mobile communication terminal made another specified speech, by recognizing another specified speech, said displaying means and said voice and sound outputting means and said voice and sound inputting means are turned off.

33. A glasses type display controlling method in accordance with any of claims 21 to 26, wherein:

said information communication terminal is a communication terminal, which provides an information receiving means for receiving information from the outside directly, and said glasses type display is in the communication state with said communication terminal, and

when said glasses type display received a designated signal from said information terminal, it was assumed that said predetermined displaying condition was satisfied, and said displaying means and said voice and sound outputting means and said voice and sound inputting means are turned on.

34. A glasses type display controlling method in accordance with any of claims 21 to 26, wherein:

said information communication terminal is a communication terminal, which provides an information receiving means for receiving information from the outside directly, and said glasses type display is in the communication state with said communication terminal, and

when said glasses type display received another designated signal from said information terminal, said displaying means and said voice and sound outputting means and said voice and sound inputting means are turned off.

35. A glasses type display controlling method in accordance with any of claims 21 to 26, wherein:

said information communication terminal is an audio-visual instrument, which provides an information receiving means for receiving 5 information from the outside directly, and said glasses type display is in the communication state with said audio-visual instrument, and

when said glasses type display received a designated signal from said audio-visual instrument, it was assumed that said predetermined displaying condition was satisfied, and said displaying 10 means and said voice and sound outputting means and said voice and sound inputting means are turned on.

36. A glasses type display controlling method in accordance with any of claims 21 to 26, wherein:

said information communication terminal is an audio-visual instrument, which provides an information receiving means for receiving 5 information from the outside directly, and said glasses type display is in the communication state with said audio-visual instrument, and

when said glasses type display received another designated signal from said audio-visual instrument, said displaying means and said voice and sound outputting means and said voice and sound inputting 10 means are turned off, or

when signals from said audio-visual instrument have not been received at said glasses type display, said displaying means and said voice and sound outputting means and said voice and sound inputting means are turned off.

37. A glasses type display controlling method in accordance with any of claims 21 to 36, wherein:

said glasses type display provides said information communication terminal inside of said glasses type display, instead of 5 connecting to said information communication terminal.